



# UNITED STATES PATENT AND TRADEMARK OFFICE

*len*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,167	03/29/2004	Matthew Compton	282566US8X	3011
22850	7590	08/21/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER VU, THONG H	
			ART UNIT 2616	PAPER NUMBER
			NOTIFICATION DATE 08/21/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/812,167	COMPTON, MATTHEW	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thong H. Vu	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/24</u> | 6) <input type="checkbox"/> Other: _____  |

1. Claims 1-21 are pending.

***Claim Rejections - 35 USC § 103***

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hundermer [6,987,734 B2] in view of Takase et al [Takase 6,411,620 B1].

2. As per claim 1, Hundermer discloses A network interface connectable to a packet-based data network on which a plurality of different types of payload data (i.e.: video, audio) are distinguished by network-based packet header data [Hundermer, Internet or network- based packet, Fig 1]; said network interface comprising:

a plurality of data handling nodes [Hundermer, server, mainframe, col 4 lines 28-42]; and

a routing arrangement responsive to a packet identifier for routing data packets between said data handling nodes [Hundermer, router 42, Fig 2; packet ID, col 8line 10]; in which:

one of said data handling nodes is a network processor for receiving data packets from and transmitting data packets to said packet-based network [Hundermer, packet with VPN server, col 8 lines 18-43]; said network processor being operable:

a) in the case of a data packet received from said data network, to detect a type of payload data from said network-based packet header data; (to remove said network-based packet header data from said packet;) and to associate with said packet an identifier which specifies a route across said routing arrangement to a target data handling node and a data handling operation to be carried out by said target data

handling node; [Hundermer, header, video-audio packets, packet ID and transmit to client or target node, col 9 lines 1-36] and

b) in the case of a data packet received from another data handling node and having an associated packet identifier, to detect a type of payload data from said packet identifier; (to remove said packet identifier); to apply network-based packet header data in dependence on said packet identifier; and to launch said data packet onto said network [Hundermer, header, packet ID and transmit to client or target node, col 9 lines 1-36].

However Hundermer does not explicitly detail (a) remove said network-based packet header data from said packet, and (b) remove said packet identifier.

It was well-known in the art that the header or packet ID could be removed in process to transfer data or payload via different networks as taught by Takase [Takase, removing the message header, Fig 22, col 15 lines 30-45] and deleting a packet with information Identifier [Takase, col 42 lines 15-20 and 60-64]

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the technique of removing the header or packet ID as taught by Takase into the Hundermer's apparatus in order to utilize the routing process.

Doing so would provide efficient and fast routing data packet via network.

3. As per claim 2, Hundermer-Takase disclose in which one of said data handling nodes is a data processing arrangement [Hundermer, processing, col 14 lines 4-43].

4. As per claim 3, Hundermer-Takase disclose in which one of said data handling nodes is a computer interface [Hundermer, interface, col 5 line 59].
5. As per claim 4, Hundermer-Takase disclose in which said identifier comprises a type identifier defining a target data handling node and an action identifier defining a data handling operation to be carried out by said target data handling node.
6. As per claim 5, Hundermer-Takase disclose in which said routing arrangement comprises a de-multiplexer for de-multiplexing different types of packets to different As per claim routing paths in dependence on said type identifier [Hundermer, identify the type of packet, col 9 lines 1-20].
7. As per claim 6, Hundermer-Takase disclose in which a respective multiplexer is associated with each data handling node, each multiplexer being arranged to receive data packets from said routing paths which have that data handling node as a target node [Hundermer, multiplex, col 3 line 2].
8. As per claim 7, Hundermer-Takase disclose said types of payload data include audio data and video data; and one of said data handling nodes is an audio/video processor for extracting audio and/or video data from a packet payload and generating an output audio and/or video signal [Hundermer, video-audio, col 9 line 6].
9. As per claim 8, Hundermer-Takase disclose in the case of a data packet received from said data network having an audio or video data payload, said network processor is arranged to associate with said packet an action identifier which specifies whether said payload comprises audio or videodata and a type identifier specifying said audio/video processor as said target data handling node; and said audio/video

Art Unit: 2616

processor processes said data packet as audio data or as video data in dependence on said action identifier [Hundermer, video-audio, col 9 line 6].

10. As per claim 9, Hundermer-Takase disclose said network processor has an associated memory;

said types of payload data include at least video data; and said network processor is operable in a second mode in which an incoming video data packet is stored in said memory at a storage location dependent upon said video data carried by that packet; said video data being subsequently read out for output via a data handling node [Hundermer, video-audio, col 9 line 6].

11. As per claim 10, Hundermer-Takase disclose in which said storage location depends on pixel position(s) relating to said video data [Hundermer, video-audio, col 9 line 6].

12. As per claim 11, Hundermer-Takase disclose in which said video data is read out from said memory substantially straight after being stored in said memory [Hundermer, video-audio, col 9 line 6].

13. As per claim 12, Hundermer-Takase disclose in which said video data is read out from said memory a predetermined delay period after being stored [Hundermer, video-audio, col 9 line 6].

14. As per claim 13, Hundermer-Takase disclose in which at least one of said types of payload data represents asynchronous data to be carried by said network [Takasse, ATM, Fig 6].

Art Unit: 2616

15. As per claim 14 Hundermer-Takase disclose A data network comprising:  
a plurality of data handling nodes, each having a network interface according to claim 1; and a data network connecting said data handling nodes via said respective network interfaces [see rejection claim 1].

16. As per claim 15, Hundermer-Takase disclose in which each data handling node comprises a source and/or a sink of data according to at least one of said types of payload data as inherent feature of Internet.

17. As per claim 16 Hundermer-Takase disclose A data handling node having a source and/or a sink of data according to at least one of said types of payload data; and a network interface according to claim 1 as inherent feature of Internet.

18. As per claim 17 Hundermer discloses A method of operation of a network interface connectable to a packet-based data network on which a plurality of different types of payload data are distinguished by network-based packet header data;

said network interface comprising a plurality of data handling nodes [Hundermer, server, mainframe, col 4 lines 28-42]; and

a routing arrangement responsive to a packet identifier for routing data packets between said data handling nodes [Hundermer, router 42, Fig 2; packet ID, col 8 line 10];

in which one of said data handling nodes is a network processor for receiving data packets from and transmitting data packets to said packet-based network [Hundermer, packet with VPN server, col 8 lines 18-43]; said method comprising the

Art Unit: 2616

steps of:

- a) in the case of a data packet received from said data network, detecting a type of payload data from said network-based packet header data; (removing said network-based packet header data from said packet); and associating with said packet an identifier which specifies a route across said routing arrangement to a target data handling node and a data handling operation to be carded out by said target data handling node [Hundermer, header, video-audio packets, packet ID and transmit to client or target node, col 9 lines 1-36]; and
- b) in the case of a data packet received from another data handling node and having an associated packet identifier, detecting a type of payload data from said packet identifier; (removing said packet identifier); applying network-based packet header data in dependence on said packet identifier; and launching said data packet onto said network [Hundermer, header, video-audio packets, packet ID and transmit to client or target node, col 9 lines 1-36].

However Hunderner does not explicitly detail (a) remove said network-based packet header data from said packet, and (b) remove said packet identifier.

It was well-known in the art that the header or packet ID could be removed in process to transfer data or payload via different networks as taught by Takase [Takase, removing the message header, Fig 22, col 15 lines 30-45] and deleting a packet with information Identifier [Takase, col 42 lines 15-20 and 60-64]

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the technique of removing the header or packet ID



Art Unit: 2616

as taught by Takase into the Hundermer's apparatus in order to utilize the routing process.

Doing so would provide efficient and fast routing data packet via network.

19. As per claim 18 Hundermer-Takase disclose Computer software having program code for carrying out a method according to claim 17 [Hundermer, program product, col 5 liens 1-10].

20. As per claim 19 Hundermer-Takase disclose A providing medium by which software according to claim 18 is provided [Hundermer, software, col 5 liens 1-10].

As per claim 20, Hundermer-Takase disclose said medium being a storage medium [Hundermer, DVD, CD-ROM, col 5 liens 10].

21. As per claim 21, Hundermer-Takase disclose said medium being a transmission medium [Hundermer, POTS, wireless, Internet, WAN, LAN, col 6 lines 1-10].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong H. Vu whose telephone number is 571-272-3904. The examiner can normally be reached on 6:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Thong Vu**  
**Primary Examiner**



**THONG VU**  
**PRIMARY PATENT EXAMINER**